

provide the memory and display, thereby allowing the MP3 player to consist of merely a decoder, batteries, and an audio amplifier. Display module 10 can further automatically configure vehicle preferences for such items as those relating to seat positions and programmed radio channels. In home control applications, the display module can function as a door key or security system key, set house preferences, locate the user, and forward voice call data to the user. A further example includes functioning as a pedometer display and recorder, or as a sports score recorder (e.g., golf score). Such a display module may also serve as part of a remote control to establish customized preferences. An information technology (IT) device may host the display module during device configuration and maintenance. Mobile telephones may benefit from the memory storage and display capabilities of the display module of the present invention, thereby reducing the cost, size, and complexity of the mobile telephone. As a further example, wearable host devices, such as a wristband, can be configured to receive a display module to provide access to personal information and conventional digital watch functions.

[0046] Display module 10 has many advantages valuable to a user including, but not limited to, cost reductions combined with increased functionality. First, because the display module interfaces to the host device only when needed, eliminating displays can reduce the overall cost of host devices and user interfaces dedicated to individual host devices. In addition, cost limitations often dictate that the dedicated displays have less capability than display module 10, so the display quality may be improved. Second, host devices that previously lacked display capability can now provide detailed status and operational information to the user on-demand via display module 10. Because a single display module 10 can interface to a variety of

devices as the user needs access, it creates the opportunity for the host device to provide helpful information to the user, including instructional, maintenance, diagnostic, and repair information. Data received by display module 10 from a host device can automatically update maintenance schedule information on a subsequent synchronization with the calendar or task programs of the handheld computer. As an example, a vehicle, acting as a host device, may transfer a complete factory recommended maintenance schedule to display module 10, which subsequently transfers the schedule to handheld computer 100, whereby handheld computer 100 calendar program alerts the user as scheduled maintenance is needed.

[0047] While the detailed drawings, specific examples, and particular formulations given describe exemplary embodiments, they serve the purpose of illustration only. The hardware and software configurations shown and described may differ depending on the chosen performance characteristics and physical characteristics of the computing devices. For example, the type of computing device, communications bus, or processor used may differ. The systems shown and described are not limited to the precise details and conditions disclosed. Furthermore, other substitutions, modifications, changes, and omissions may be made in the design, operating conditions, and arrangement of the exemplary embodiments without departing from the scope of the invention as expressed in the appended claims.